The Direction of Vectors in <*a,b*> Component Form
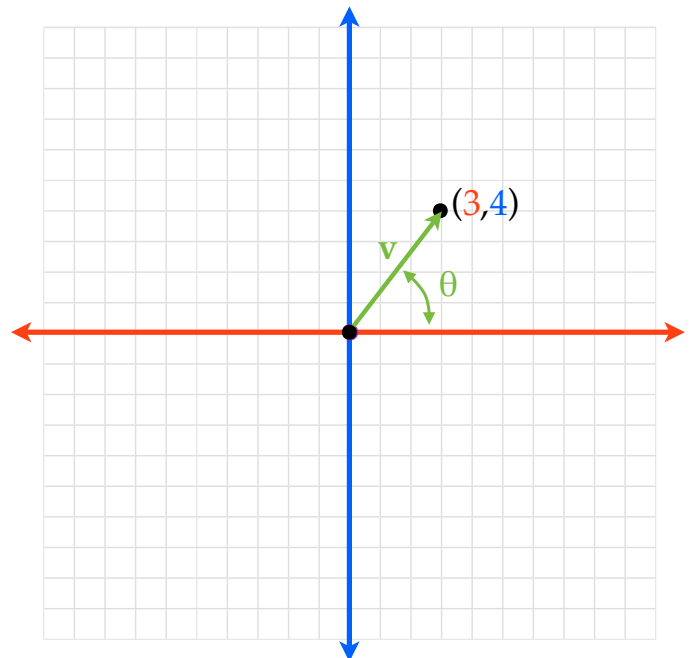
Given **v** is in standard position and expressed in component form $\mathbf{v} = \langle a,b \rangle$, then...

$$\tan \theta = \frac{b}{a} \qquad -90° < \theta < 90°$$

Given **v** is in standard position and expressed in component form $\mathbf{v} = \langle a,b \rangle$, then...
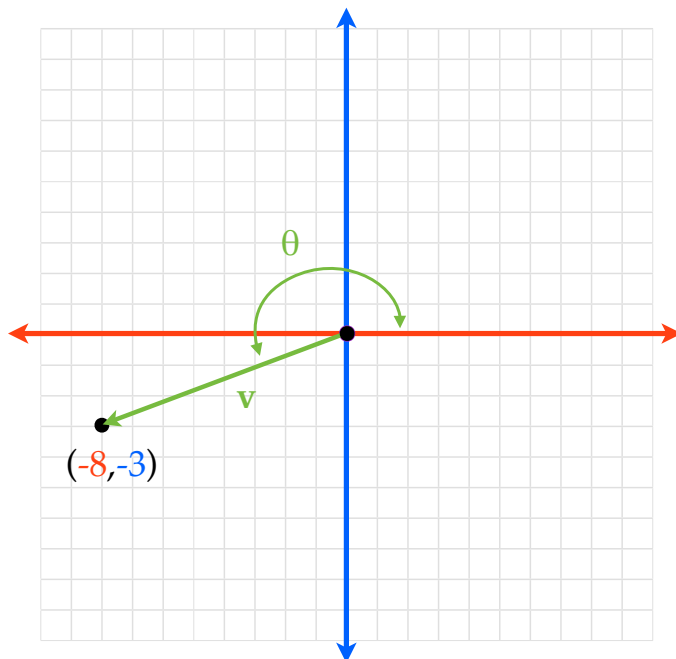
$$\tan \theta = \frac{b}{a} \qquad -90° < \theta < 90°$$

Given **v** is in standard position and expressed in component form $\mathbf{v} = \langle a, b \rangle$, then...

$$\tan \theta = \frac{b}{a} \qquad -90° < \theta < 90°$$

θ

v

(-8,-3)

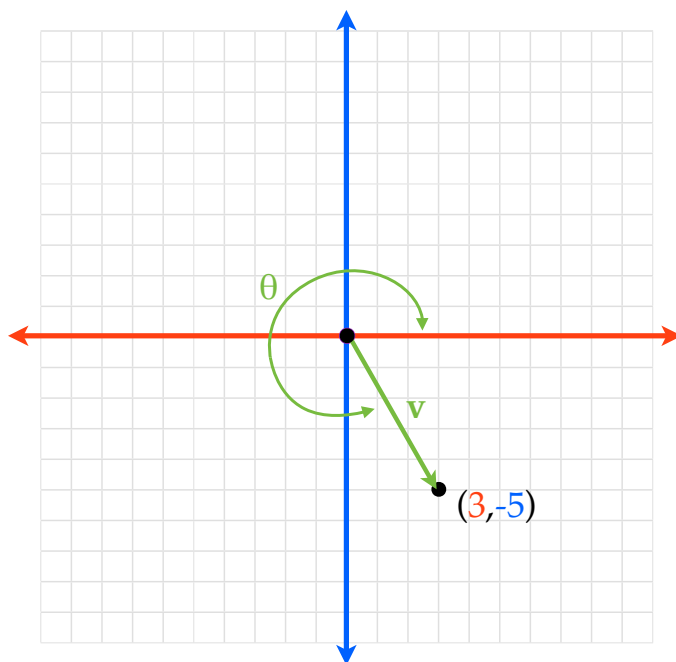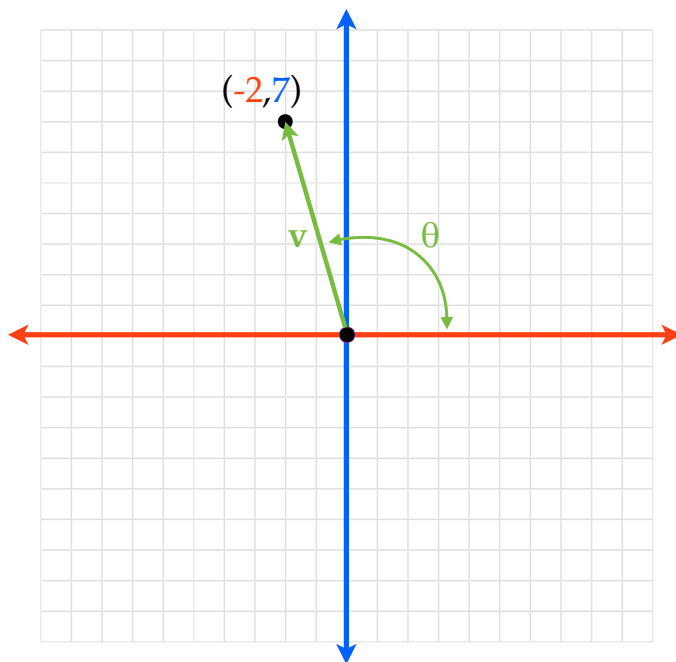Given **v** is in standard position and expressed in component form $\mathbf{v} = \langle a, b \rangle$, then...

$$\tan \theta = \frac{b}{a} \qquad -90° < \theta < 90°$$

θ

v

(3,-5)

The Direction of Vectors in <a,b> Component Form

Given **v** is in standard position and expressed in component form $\mathbf{v} = \langle a,b \rangle$, then...

$$\tan \theta \;=\; \frac{b}{a} \qquad -90° < \theta < 90°$$

(-2,7)

v

θ

Given **v** is in standard position and expressed in component form $\mathbf{v} = \langle a,b \rangle$, then...

$$\tan \theta \;=\; \frac{b}{a} \qquad -90° < \theta < 90°$$

The Direction of Vectors in <a,b> Component Form